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Final Report
Secretary of the Navy Research Chair in Physical Oceanography
Grant #N00014-85-J-1241

This report

The grant was directed mainly at understanding the high energy region near the Gulf Stream system. The final report consists essentially of the attached list of publications completed. *Included topics are*

The Navy Chair constituted a very useful and efficient way for the PI to bring together a number of independently supported efforts in tomography, modelling, altimetry, scatterometry, etc. for the purpose of understanding the near-Gulf Stream region. An unfortunate occurrence during the lifetime of the Grant was the institution of the University Research Initiative Program (URIP). Along with a number of collaborators, the work supported by the present grant was extended to a much more ambitious attempt at observing and understanding the behavior of the western North Atlantic. When the URIP funding unexpectedly collapsed early in that contract, some of the commitments made under it had to be supported (with ONR agreement) under the Chair. This disruption delayed the goals of the grant, but it is believed that the publication list demonstrates a useful degree of achievement despite this problem.

*Keywords: Bibliographies;
Oceanography; Ocean models;
Measurement/test methods;
Acoustic scattering; Altimeters;
Hydrography*

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Publications Supported Wholly or in Part on This Grant

Barth, N. and C. Wunsch, 1989: Oceanographic experiment design by simulated annealing. *J. Phys. Oc.*, 20, 1249-1263.

Federiuk, J., 1987: Determination of advection and diffusion in a thermohaline staircase region. S. M. thesis, Dept. of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology, 90 pp.

Fukumori, I. and C. Wunsch, 1990: Efficient representation of the North Atlantic hydrographic and chemical distributions. *Prog. in Oceanog.*, In press.

Fukumori, I. and C. Wunsch, 1990: Large-scale low frequency fluctuation of North Atlantic sea surface topography observed from GEOSAT. To be published.

Fukumori, I., 1989: Efficient representation of the hydrographic structure of the North Atlantic Ocean and aspects of the circulation from objective methods. PhD thesis, MIT/WHOI, 234 pp.

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